

HDcctv / HD-SDI

Available from



HDcctv Technology

Item	Resolution	Speed of Data Transfer	Related Standard	HDcctv
SD-SDI	525lines SD	270Mb/s	SMPTE 259M	
HD-SDI	1080 60i/30P & 720P	1.485/1.001 Gb/s	SMPTE 292M	HDcctv
3G-SDI	1080 60P	2.97/1.001 Gb/s	SMPTE 424M	

The HDcctv Standard derives from a set of standards, including SMPTE-292M, developed by the Society of Motion Picture and Television Engineers for application in broadcast television studios. This broadcast television technology, called "High-Definition Serial Digital Interface", or HD-SDI, has been technically proven through application in television studios worldwide since the late 1990's. Cost effectiveness is defined differently for surveillance applications than for broadcast applications. Through a unique cross-industry license agreement executed in 2009, SMPTE partnered with the HDcctv Alliance to project the HD-SDI technology into surveillance via the HDcctv Standard.



Digitally Delivers HD Megapixel Video over Coax Cable

**Perfect
Clarity**
No Analog Noise

Uncompressed
Zero Latency
No Compression
Artifacts

**What is
HDcctv?**

HD Megapixel
Video
1080p or 720P

Coax Cable
Simple Upgrade
Resilient to Network
Failure

Low
Maintenance
Cost

Type	Analog CCTV	IP Megapixel Camera	HDcctv
Image Sensor	CCD or CMOS	CMOS or CCD	CCD or CMOS
Resolution	580TVL	1M, 2M, 3M	720P, 1080P
Transmission	Coaxial Cable	Network	Coaxial Cable
Advantage	<input type="checkbox"/> Cost Effective <input type="checkbox"/> Prompt reaction velocity at backlight	<input type="checkbox"/> Multi-recording available (connect to different client servers) <input type="checkbox"/> Remote operation (i.e restore) is available	<input type="checkbox"/> HD Display & Recording <input type="checkbox"/> Cost effective than Megapixel IP <input type="checkbox"/> No delay and No frame loss
Disadvantage	<input type="checkbox"/> Limited resolution <input type="checkbox"/> Grainy and Blurry images. <input type="checkbox"/> (worthless for police investigation)	<input type="checkbox"/> Low Luminance (compare to analogue) <input type="checkbox"/> Slow reaction velocity at backlight <input type="checkbox"/> Low frame rate due to network bandwidth <input type="checkbox"/> Delay due to encoding/decoding <input type="checkbox"/> High cost for Backbone network	Cost is little higher than analog CCTV
Video Interface			

HDD01 : 1080P HDcctv Indoor Dome Camera

- ▣ 2.2M 1080P Full HD with Panasonic CMOS
- ▣ Video Signal: HDcctv/HD-SDI & Composite V
- ▣ 2.8~10mm Varifocal lens
- ▣ Digital Zoom Max 32x
- ▣ Day & Night
- ▣ Wide Dynamic Range
- ▣ Privacy Mask Function
- ▣ Intelligent motion detection
- ▣ Multi protocol support
- ▣ 12VDC
- ▣ Made in Korea



EC-HDD02 : 1080P HDcctv Indoor Dome Camera with IR LED

- ▣ 2.2M 1080P Full HD with Panasonic CMOS
- ▣ Video Signal: HDcctv/HD-SDI & Composite Video
- ▣ 2.8~10mm Varifocal lens
- ▣ 27 Smart IR LEDs
- ▣ Digital Zoom Max 32x
- ▣ Day & Night
- ▣ Wide Dynamic Range
- ▣ Privacy Mask Function
- ▣ Intelligent motion detection
- ▣ Multi protocol support
- ▣ 12VDC
- ▣ Made in Korea



HDVD01 : 1080P HDcctv Outdoor Vandal Dome Camera

- ▣ 2.2M 1080P Full HD with Panasonic CMOS
- ▣ Video Signal: HDcctv/HD-SDI & Composite Video
- ▣ 2.8~10mm Varifocal lens
- ▣ 27 Smart IR LEDs
- ▣ Digital Zoom Max 32x
- ▣ Day & Night
- ▣ Wide Dynamic Range
- ▣ Privacy Mask Function
- ▣ Intelligent motion detection
- ▣ Multi protocol support through RS-485
- ▣ 12VDC
- ▣ Made in Korea



EC-HDS01 : 1080P HDcctv Box Camera

- ▣ 2.2M 1080P Full HD with Panasonic CMOS
- ▣ Video Signal: HDcctv/HD-SDI & Composite Video
- ▣ Digital Zoom Max 32x
- ▣ Day & Night
- ▣ Wide Dynamic Range
- ▣ Privacy Mask Function
- ▣ Intelligent motion detection
- ▣ Multi protocol support through RS-485
- ▣ 12VDC
- ▣ Made in Korea



EC-HDIR42: 1080P HDcctv IR Bullet Camera



- ▣ 2.2M 1080p Full HD with Panasonic CMOS
- ▣ Video Signal: HDcctv/HD-SDI & Composite Video
- ▣ Supports WDR & ACE (Advanced Contrast Enhancement)
- ▣ 36pcs Wider range of SMART IR LED
- ▣ DNR
- ▣ Privacy Mask Function
- ▣ Intelligent Motion Detection
- ▣ Multi-protocol support through RS-485
- ▣ 3~10mm Varifocal lens
- ▣ CDS Auto switching IR LED control
- ▣ Externally Adjustable focal length and focus
- ▣ Cable managed bracket
- ▣ 12VDC
- ▣ Made in Korea

EC-WV01 : 1080P HDcctv IR Bullet Camera



- ▣ 2.2M 1080p Full HD with Panasonic CMOS
- ▣ HD SDI
- ▣ Composite Video output (750TV Lines)
- ▣ BT 1120 digital Output
- ▣ 3.0mm Wide Lens
- ▣ Digital Zoom 4x
- ▣ Day & Night
- ▣ Wide Dynamic Range
- ▣ Privacy Mask Function
- ▣ On Screen Display
- ▣ Intelligent motion detection
- ▣ Aluminum Die casting Vandal Dome Housing
- ▣ 12V DC
- ▣ Made in Korea

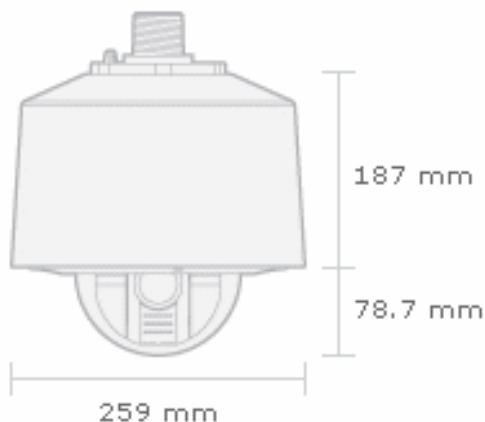
EC-HDP12: 1080P HDcctv 12X Full HD Mega-pixel Speed Dome Camera



- 1920 X1080(1080p @ 30fps)
- 12x Optical Zoom, 10x Digital Zoom
- Auto-Focus, WDR(Wide Dynamic Range), BLC/HSBLC, DNR(Digital Noise Reduction)
- Day & Night (Auto/BW/Color)
- Pan 360° Endless Rotation, Tilt 180° Vector scan
- 210 Preset Positions (except Short-cut command)
- 8 Auto Scan, 8 Pattern, 8 Tours Consist of Presets
- 4 Alarm Input, 1 Alarm Output (Off / NC / NO)
- Programmable PTZ Speed
- Multilingual OSD
- 8 Private Mask Zone
- Standard protocol including Pelco-D / P
- Up to 99 Camera ID
- AC 24V Only



EC-HDP-20: 1080P HDcctv 20X Full HD Mega-pixel Speed Dome Camera



▣ **Real-time High Definition PTZ Camera**

Using the state of art video compression engine, real time HD video streams of 1080p can be delivered for recording and monitoring.

▣ **Wide Dynamic Range**

This feature is effective when shooting images against the sun, or when shooting a very bright object.

▣ **Day & Night by ICR**

For increased sensitivity of image sensor efficiently, a mechanical actuator can shift infrared (IR) Cut filter to disengaged from image path automatically in the low light environment.

▣ **Vector Driving**

Based on the shortest time and the smallest cost concept, each Pan and Tilt motion is done with simultaneous and harmonious manner by Vector drive technology.

▣ **Micro-Step Technology**

Due to the Micro-stepping technology, one step angle is divided by 256. Accordingly, high accuracy as well as ultra low sound noise (under 60dB) can be achieved.

Micro-stepping technology enables ultra low speed down to 0.05°/s for high zoom operations.

▣ **Independent Camera Setup**

Camera setup such as AWE, WB and etc can be configured on each preset view. Target spot in different distance and illumination can be watched with most preferred setup.

▣ **Made in Korea**

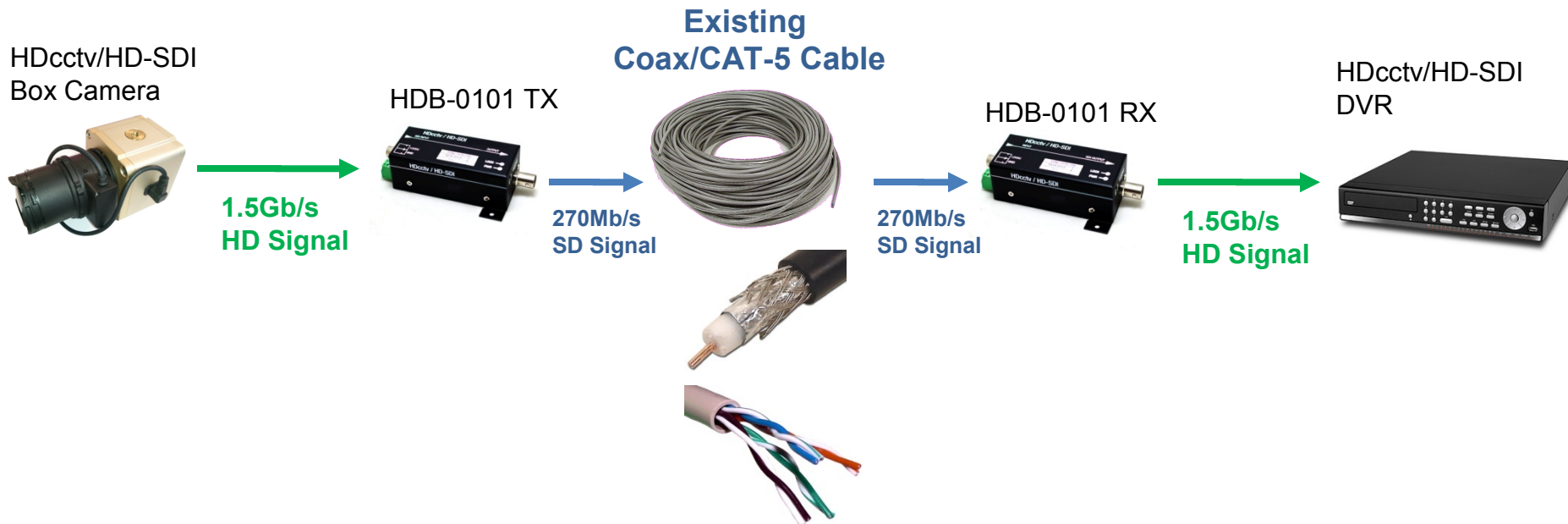
EA-HDB-0101: HDcctv Balun



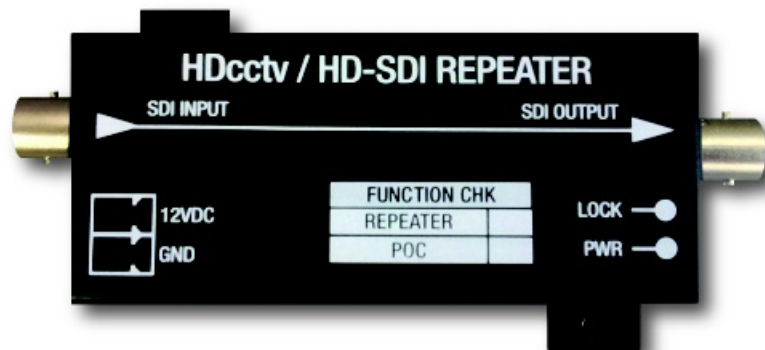
ITEM	Transmitter Specification	Receiver Specification
Video Input	1Ch HD-SDI (1.485Gbps)	1Ch SD-SDI (270Mbps) 1Ch UTP
Video Output	1Ch SD-SDI (270Mbps) 1Ch UTP	1Ch HD-SDI (1.485Gbps)
Video I/O Connector	2ea 75ohm BNC 2-Pin Terminal Block (UTP)	2ea 75ohm BNC 2-Pin Terminal Block (UTP)
Video I/O Cable	Coax Cable UTP Cable	Coax Cable UTP Cable
Cable Length	Coax (RG59) : 300m UTP (CAT5) : T.B.D	
LED	Presence, Power	
Operational Condition	0°C~40°C (32°F~104°F), Humidity 20~80%	
Power	DC 12V / 2A (2-Pin Terminal Block)	
Unit Dimension (W x D x H)	112mm x 68mm x 23mm	

HDB-0101: HDcctv Balun (Available on
FEB/2012)

**HD Balun (HSB-0101) connectivity solution can be used
with a broad range of EXISTING coaxial and CAT-5
cables.**



EA-HDR-0101: HDcctv Repeater



SMPTE292M Compatible

Video Signal: HDcctv

1 HDcctv/HD-SDI Signal Input

1 HDcctv/HD-SDI Output

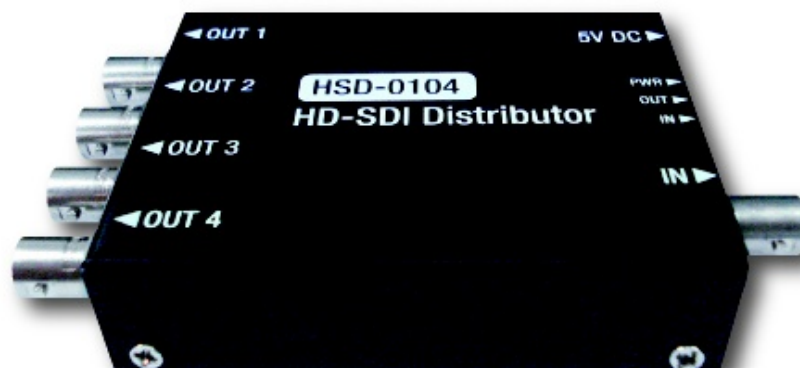
Easy Use & Installation

Specifications

- Video Input: 1CH. HDcctv/ HD-SDI (BNC)
- Input Resolution: 1920x1080p(60/59.94/50/30/29.97/25)Hz,
1920x1080i(60/59.94/50)Hz,
1280x720p(60/59.94/50)Hz
- Video Output: 1CH. HDcctv/ HD-SDI (BNC)
- Output Resolution: 1920x1080p(60/59.94/50/30/29.97/25)Hz,
1920x1080i(60/59.94/50)Hz,
1280x720p(60/59.94/50)Hz
- Power: 12V DC 1A \pm 10%
- Power Consumption: Max 1W
- Operation Temperature: 14F~140F
- Operation Humidity: 30%~80% RH

Made in Korea

EA-HDSP-0104: HDcctv 1 to 4 Splitter

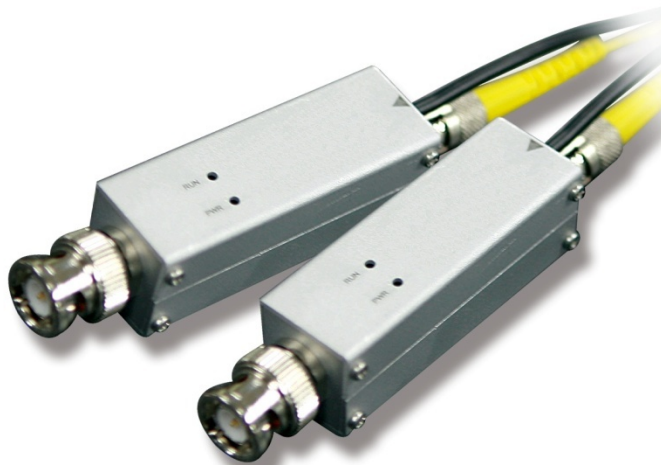


- SMPTE292M Compatible
- Video Signal: HDcctv
- 1 HDcctv/HD-SDI Signal Input
- 4 HDcctv/HD-SDI Output
- Easy Use & Installation
- Made in Korea

Specifications

- Video Input: 1CH. HDcctv/ HD-SDI (BNC)
- Input Resolution: 1920x1080p(60/59.94/50/30/29.97/25)Hz,
1920x1080i(60/59.94/50)Hz,
1280x720p(60/59.94/50)Hz
- Video Output: 4CH. HDcctv/ HD-SDI (BNC)
- Output Resolution: 1920x1080p(60/59.94/50/30/29.97/25)Hz,
920x1080i(60/59.94/50)Hz,
1280x720p(60/59.94/50)Hz
- Power: 5V DC 1A \pm 10%
- Operation Temperature: 14F~140F
- Operation Humidity: 30%~80% RH

FLIT-1000 : HDcctv Fiber Optic 3G-SDI Digital Video Extender



- Fiber Optic 3G-SDI Digital Video Transport System.
- Designed to transport SMPTE-424M 3G-SDI, SMPTE-292M HD-SDI, SMPTE-259M SDI over long distance through either single-mode or multi-mode fiber with the same model.
- MADE IN KOREA

Specifications

- Video Input: 1CH / 3G-SDI, HD-SDI (BNC)
- Input Resolution: SMPTE-424M 3G-SDI, SMPTE-292M HD-SDI, SMPTE-259M SDI
- Video Output: 1CH / 3G-SDI, HD-SDI (BNC)
- Output Resolution: SMPTE-424M 3G-SDI, SMPTE-292M HD-SDI, SMPTE-259M SDI
- Distance for 3G-SDI: About 6 Miles
- Dimension: 76" x .76" x 2"
- Power: 5V DC 1.5A \pm 10%
- Power Consumption: Max 1W
- Operation Temperature: -4F~158F
- Operation Humidity: 0 to 95% RH, non-condensing

HD Series – HDcctv H.264 Digital Video Recorders with 1080P HDMI Output

ES-HD-0405: 4 Channel Video, 48fps @ 1280*720 / 20fps @ 1920*1080 Recording

ES-HD-0812: 8 Channel Video, 120fps @ 1280*720 / 40fps @ 1920*1080 Recording

ES-HD-1620: 16 Channel Video, 192fps @ 1280*720 / 80fps @ 1920*1080 Recording

- H.264 Video compression records.
- HD resolution recording at up to 1280x720/1920x1080
- 1080p HDMI output & simultaneous VGA output.
- QUADPLEX: Simultaneous live or playback while still continuing to record, network transfer, and backup.
- 4 (16) Audio Input, 1 Audio Output
- 4 /8/16 Sensor Input, 1/2/4 Alarm Output.
- 2 internal SATA port : HDD storage up to 4TB.
- 1 eSata port for expanding Storage.
- 1 RS-485 for PTZ Camera Control.
- 2 USB 2.0 port for backup of recorded data, firmware upgrade, configuration export/imp
- Individual channel operation such as FPS, quality, recording mode, & detection zone
- Network hardware supports 10/100/1000 Mbps.
- Various network access: Network client SW, Web-viewer, Smartphone APP, and Free 256 Channel CMS.
- Remote Setup and Remote Upgrade.
- Remote access via PC, MAC®, or smart phones such as the iPhone®, Android™, and BlackBerry™.
- Recording priority programmable per channel for schedule, continuous, alarm, motion, or continuous.
- Free DDNS server for use with Dynamic IP addresses.
- Bandwidth control
- E-mail event notification, along with image or AVI file attachment.
- Covert Channel.
- NTP (Network Time Protocol).
- Watermark.
- Synchronized audio for court evidence.
- Bi-directional Audio.
- Time Stamp over backup data for court evidence.
- Easy and various data backup via DVD, USB flash drive, USB external HDD, and network
- HDD S.M.A.R.T status check and alert via e-mail or internal beep.
- USB Mouse, IR Remote Control.
- Multi OSD languages.
- Made in Korea



Full HD Series – HDcctv H.264 DVR with 1080P HDMI Output & Full HDcctv Recording

ES-HDR-0412: 4 Channel Video, 120fps @1280*720 / 60fps @1920*1080

- H.264 Video compression records.
- **Realtime Recording @ 1280 x 720**
- **15fps recording per channel @ 1920x1080**
- 1080p HDMI output & simultaneous VGA output.
- QUADPLEX: Simultaneous live or playback while still continuing to record, network transfer, and backup.
- 4 Audio Input, 1 Audio Output
- 4 Sensor Input, 1 Alarm Output.
- 4 internal SATA port : HDD storage up to 8TB.
- 1 eSata port for expanding Storage.
- 2 RS-485 for Camera Control.
- 2 USB 2.0 port for backup of recorded data, firmware upgrade, configuration export/import, or USB mouse.
- Individual channel operation such as FPS, quality, recording mode, & detection zone
- Network hardware supports 10/100/1000 Mbps.
- Various network access: Network client SW, Web-viewer, Smartphone APP, and Free 256 Channel CMS.
- Remote Setup and Remote Upgrade.
- Remote access via PC, MAC®, or smart phones such as the iPhone®, Android™, and BlackBerry™.
- Recording priority programmable per channel for schedule, continuous, alarm, motion, or continuous.
- Free DDNS server for use with Dynamic IP addresses.
- Bandwidth control
- E-mail event notification, along with image or AVI file attachment.
- Covert Channel.
- NTP (Network Time Protocol).
- Watermark.
- Synchronized audio for court evidence.
- Bi-directional Audio.
- Time Stamp over backup data for court evidence.
- Easy and various data backup via DVD, USB flash drive, USB external HDD, and network
- HDD S.M.A.R.T status check and alert via e-mail or internal beep.
- USB Mouse, IR Remote Control.
- Multi OSD languages.
- Made in Korea



Hybrid – 2CH HD + 8CH Full D1 DVR with 1080P HDMI Output

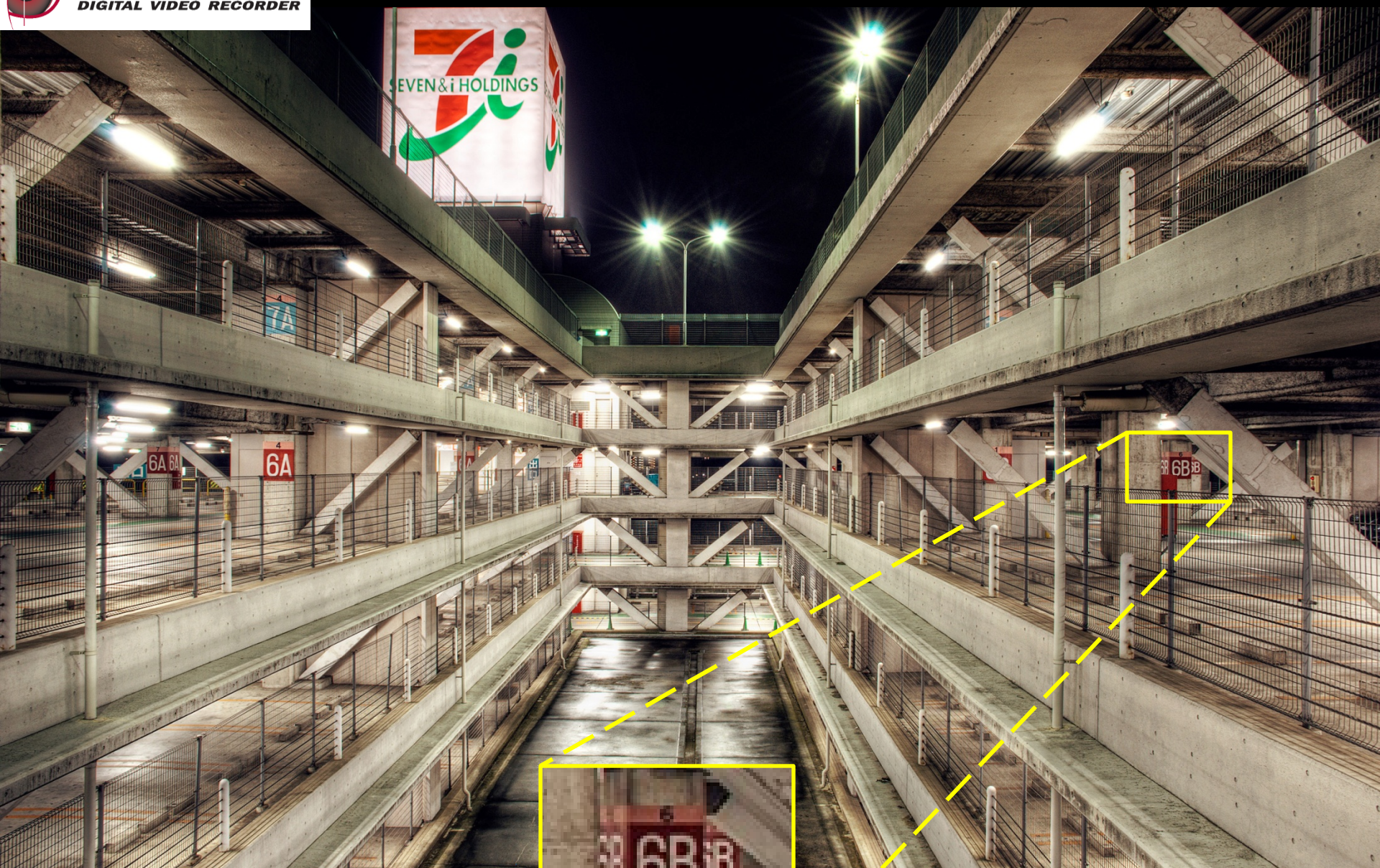
ES-HDR-1012: 2 Channel HD Video, 60fps @1280*720 / 30fps @1920*1080
+ 8 Channel Analog Video, 240fos @ D1

- H.264 Video compression records.
- **Analog Recording: D1 Realtime**
- **HD Recoding: 720P * 60FPS / 1080P * 30FPS**
- 1080p HDMI output & simultaneous VGA output.
- QUADPLEX: Simultaneous live or playback while still continuing to record, network transfer, and backup.
- 4 Audio Input, 1 Audio Output
- 4 Sensor Input, 1 Alarm Output.
- 4 internal SATA port : HDD storage up to 8TB.
- 1 eSata port for expanding Storage.
- 2 RS-485 for Camera Control.
- 2 USB 2.0 port for backup of recorded data, firmware upgrade, configuration export/import, or USB mouse.
- Individual channel operation such as FPS, quality, recording mode, & detection zone
- Network hardware supports 10/100/1000 Mbps.
- Various network access: Network client SW, Web-viewer, Smartphone APP, and Free 256 Channel CMS.
- Remote Setup and Remote Upgrade.
- Remote access via PC, MAC®, or smart phones such as the iPhone®, Android™, and BlackBerry™.
- Recording priority programmable per channel for schedule, continuous, alarm, motion, or continuous.
- Free DDNS server for use with Dynamic IP addresses.
- Bandwidth control
- E-mail event notification, along with image or AVI file attachment.
- Covert Channel.
- NTP (Network Time Protocol).
- Watermark.
- Synchronized audio for court evidence.
- Bi-directional Audio.
- Time Stamp over backup data for court evidence.
- Easy and various data backup via DVD, USB flash drive, USB external HDD, and network
- HDD S.M.A.R.T status check and alert via e-mail or internal beep.
- USB Mouse, IR Remote Control.
- Multi OSD languages.
- Made in Korea



HDMITM
HIGH-DEFINITION MULTIMEDIA INTERFACE





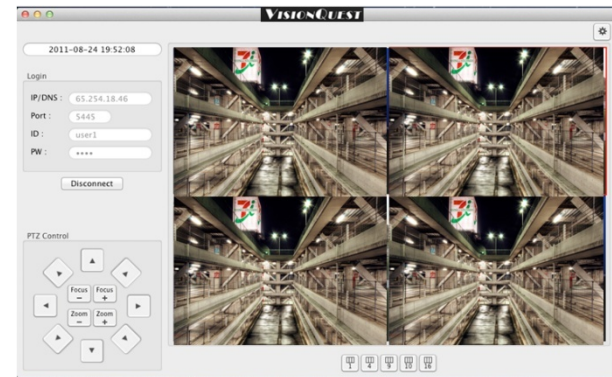
Digital Zoom from 1920 X 1080





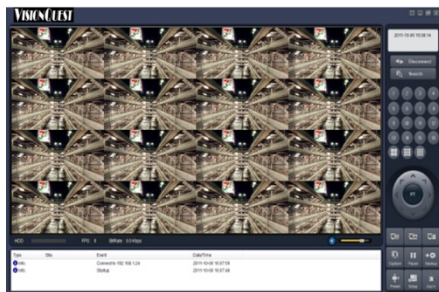
CMS (Up to 16 DVRs)

- ▣ Live
- ▣ Local PC Recording
- ▣ Bi-Directional Audio
- ▣ Remote Alarm Control
- ▣ Camera control
- ▣ Playback
- ▣ Backup
- ▣ Remote Setup
- ▣ Remote Upgrade



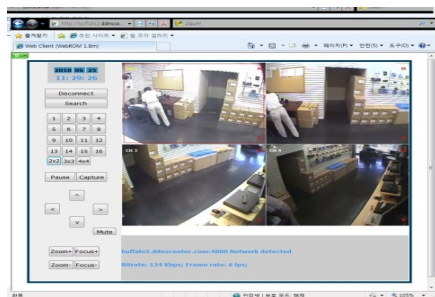
MAC Viewer

- ▣ Live
- ▣ Camera control
- ▣ Playback



Network SW (1:1)

- ▣ Live
- ▣ Local PC Recording
- ▣ Bi-Directional Audio
- ▣ Remote Alarm Control
- ▣ Camera control
- ▣ Playback
- ▣ Backup
- ▣ Remote Setup
- ▣ Remote Upgrade



Web Viewer (1:1)

- ▣ Live
- ▣ Camera control
- ▣ Playback
- ▣ Backup
- ▣ Remote Setup
- ▣ Remote Upgrade



Smartphone viewer

- ▣ Live
- ▣ Camera control
- ▣ Playback



HD DVR : Unbeatable Compression Performance



1TB HDD goes about 5days
for 4 channels 1280X720 HD real-time recording.

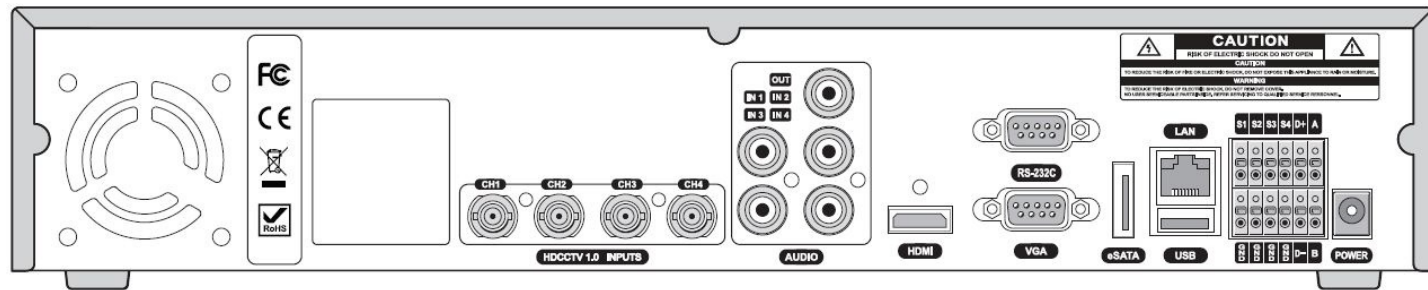
4-Channel, Continuous, 1280x720@30fps, Audio On

HDD Capacity	Level 5 (H)		Level 4		Level 3		Level 2		Level 1 (L)	
	day(s)	hour(s)	day(s)	hour(s)	day(s)	hour(s)	day(s)	hour(s)	day(s)	hour(s)
250GB	0	22	1	3	1	12	1	20	2	6
320GB	1	5	1	12	2	0	2	9	3	23
500GB	1	22	2	10	3	5	3	20	4	18
1TB	4	23	5	23	6	14	7	21	9	18
1.5TB	6	0	7	12	10	22	11	21	14	18
2TB	8	1	10	1	13	7	15	22	19	18

4-Channel, Continuous, 640x360@30fps, Audio On

HDD Capacity	Level 5 (H)		Level 4		Level 3		Level 2		Level 1 (L)	
	day(s)	hour(s)	day(s)	hour(s)	day(s)	hour(s)	day(s)	hour(s)	day(s)	hour(s)
250GB	1	20	2	7	3	1	3	16	4	13
320GB	2	10	3	0	4	0	4	19	6	23
500GB	3	21	4	20	6	10	7	16	9	13
1TB	8	23	9	22	13	4	15	17	19	13
1.5TB	12	1	15	0	19	21	23	19	29	13
2TB	16	2	20	2	26	15	31	20	39	13

- Up to 6 times faster than USB 2.0 or 1394
- Robust and user-friendly external connection
- High performance, cost-effective expansion storage



eSATA
Storage

WEB SETUP

(ver 1.04)

DISPLAY	RECORD	DEVICE	STORAGE	SYSTEM	NETWORK	UPGRADE
CHANNEL		CH1				
RESOLUTION		1280 x 720				
FRAME RATE		30 FPS				
QUALITY		LEVEL 4				
RECORDING		CONTINUOUS				
SENSOR RECORDING		- - - -				
PRE RECORD		1 MINUTE(S)				
POST EVENT RECORD		10 SECOND(S)				
AUDIO		<input type="radio"/> ON <input checked="" type="radio"/> OFF				
EZRecord		APPLY EZRecord				
RESOLUTION		1280 x 720				
FRAME RATE		30 FPS				
QUALITY		LEVEL 4				
RECORDING		CONTINUOUS				
DAYS TO RECORD		4 DAY(S) 23 HOUR(S)				

RELOAD APPLY

- ▣ **Easy and Simple Interface.**

Simple and easy operation based on instinctive graphic user interface and easy to schedule complicated weekly recording plans.

- ▣ **Easy software Upgrade.**

Easy software upgrade via USB Flash drive or over network.

- ▣ **Exclusive File Format Backup.**

Export an exclusive format video which can be played via an exclusive player.

- ▣ **AVI Backup with Time Stamp**

Export AVI file which can be played via Microsoft Media Player in any PC with H.264 Decoder installed.

- ▣ **Synchronized audio for court evidence.**

- ▣ **Automatic Video Input and Video loss detection.**

- ▣ **Covert camera operation provides enhanced security.**

- ▣ **Bi-directional audio**

- ▣ **Digital Zoom over Live, Playback, Network Live, Network Playback, Backup Data Viewer.**



Atlantic Data Supplies (N.B.) Ltd.

188 Westmount Blvd.

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